

typically incidental. Tissue received by the Pathologist is routinely sectioned and depending on macroscopic findings, part or all of the tissue is processed to be examined microscopically. We hypothesised incidence differs depending on how much thyroid tissue is processed for microscopic examination.

**Methods:** All thyroid lobes and whole glands from NHS Greater Glasgow and Clyde hospitals received in a centralised Pathology laboratory between 1<sup>st</sup> June 2012 - 1<sup>st</sup> June 2013 were included.

**Results:** N=267, 121 whole glands, 146 hemi-lobectomies. 36 patients had PMC, 18 of whom had surgery for benign disease. Incidence of PMC was 27% when the entire tissue was examined, and 19% when only part examined microscopically in the total thyroidectomies ( $p=0.325$ ). In hemi-lobectomies, 8.4% and 5.7% were found to have PMC when all or part of the lobes were examined respectively ( $p=0.522$ ). Multifocal PMC was 30% in both groups, and metastatic in 3 cases.

**Conclusions:** There is a wide variation in PMC depending on how much thyroid tissue is examined, suggesting it is under reported. However this was not significant and has limited clinical significance as PMC rarely metastasises.

#### 0717: POST-THYROIDECTOMY PARATHYROID HORMONE LEVELS AS A TOOL TO GUIDE CALCIUM REPLACEMENT: IS THIS BEING USED IN PRACTICE?

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**Introduction:** According to local guidelines, post-thyroidectomy parathyroid hormone (PTH) measurement can indicate the risk of subsequent hypocalcaemia and guide need for calcium replacement. Calcium replacement is not without risk and should be avoided without clear indication. Values of PTH >2 pmol/L should preclude empirical calcium replacement as patients in this range are extremely unlikely to become hypocalcaemic. We examined local adherence to these recommendations.

**Methods:** Total and completion thyroidectomy procedures between October 2012 and December 2013 were identified from theatre records. Corresponding electronic patient records were reviewed for demographics, results and management.

**Results:** During this period, 63 relevant thyroidectomies were performed. The average patient age was 53.6 years and 21% were male ( $n=13$ ). 59% of operations ( $n=37$ ) were for thyroid cancer and 22 were for multinodular goitre (35%). Other indications included thyroid nodules or ectopic thyroid. Of 57 patients who underwent PTH measurement < 24 hours post-operatively, 23 had levels of >2.0 pmol/L. Two patients of these had mild post-operative hypocalcaemia (2.0–2.1) and one was symptomatic, requiring calcium replacement. However, fifteen patients (65%) were discharged on calcium replacement therapy.

**Conclusions:** The incidence of excessive calcium replacement is high. Adherence to local guidelines could greatly reduce this.

#### 1719: ARE FALLING RATES OF TONSILLECTOMIES CAUSING INCREASED RATES OF TONSIL RELATED MORBIDITY?

Joanne Todd\*, Mark Wilkie, David Luff. *Countess of Chester Hospital, Chester, UK.*

**Introduction:** This retrospective cohort study aims to establish if the introduction of the Non-Essential Surgical procedures policy is associated with an increase in the number of hospital admissions for tonsillitis in the face of a falling rate of tonsillectomy.

**Methods:** Patients admitted to a district general hospital between 1/10/12–31/12/12 and 1/10/10–31/12/10 for acute tonsillitis were identified using clinical coding statistics. Clinical notes were used to establish diagnosis, treatment, length of stay and cohort demographics.

**Results:** In 2010 37 patients were admitted, 24 paediatric (average age 2 yrs (range 1–10yrs) average length of stay 0.5 days (range 0–3 days)). Average adult age 28yrs (range 18–44yrs), average length of stay 1.8 days (range 1–4 days). 8% had a peritonsillar abscess and 16% had subsequent tonsillectomy. In 2012 83 patients were admitted, 61 paediatric, (average age 3 yrs (range 0–15yrs) average length of stay 0.4 days (range 0–3 days)). Average adult age 23yrs (range 16–46 yrs), average length of stay 1.7 days (range 1–4 days). No peritonsillar abscess and 1.2% had subsequent tonsillectomy.

**Conclusions:** The number of patients admitted with tonsillitis more than doubled from 2010 to 2012. However there was no evidence of higher complication rates and average length of stay was comparable.

#### 0733: MORBIDITY RATES FOLLOWING MASTOID SURGERY

Sarah Lort\*, Uday Kale. *City Hospital, Birmingham, UK.*

**Introduction:** A comparison of mastoid surgery morbidity rates at our Trust against the standards set by the Royal College of Surgeons of England comparative audit of ENT surgery 1995.

**Methods:** Retrospective data collection was carried out, looking at a five year period of mastoid surgery at a single centre. Data on 95 operations was collected, 75 primary and 20 revisions.

**Results:** We had better results compared to national audit. The hearing post-op remained unchanged for 61.1% (30.8% standard), with improvement in 15.8% (16.8% standard) and decline in 6.3% (11.9% standard). The condition of the ear cavity was dry in 80% (62.6% standard) and wet in 10.5% (15% standard). 1.1% had a temporary facial nerve palsy, compared to the standard of 0.6% for permanent palsy. There were no cases of 'dead ear' (1.3% standard).

**Conclusions:** We had lower rates of complications, with no cases of dead ear and one temporary facial nerve palsy. The decline in hearing post-operatively was less frequent, and hearing remained unchanged in more cases. We found higher rates of dry ear cavity at 6 months postoperatively. At the trust we currently have good morbidity rates, improving on the standards set out by the National Audit.

#### 0780: AN AUDIT ON ANALGESIA POST-TONSILLECTOMY

Peter Deutsch\*, Shahzada Ahmed. *Queen Elizabeth Hospital Birmingham, Birmingham, UK.*

**Introduction:** To audit current practice for post-operative tonsillectomy analgesia and compare this with identified standards from the current evidence base.

**Methods:** Review of the literature suggested the optimal combination of analgesia was: Paracetamol, NSAID (preferably Ibuprofen) and weak opiate (preferably Codeine). Last 100 tonsillectomies performed at a large university teaching hospital were identified. All patients undergoing a bilateral tonsillectomy aged between 17–50 years were included. Electronic patient notes were reviewed including: discharge prescriptions, allergies, co-morbidities and any re-attendances to A&E post-operatively.

**Results:** 51% of patients were prescribed a combination of Paracetamol and NSAID and a weak opiate. 42% were given the preferred combination of Paracetamol, Ibuprofen and Codeine. There was a wide variation in different combinations of analgesia prescribed. 11% of the cohort re-attended A&E. Four patients attended for poor pain control. All but one, were not on optimal pain relief. A re-audit has shown overall improvement in compliance with guidelines but a larger number of different combinations.

**Conclusions:** Tonsillectomy is considered to be one of the most painful ENT procedures. There is significant inter-surgeon variation in prescriptions. Local departmental standards have been agreed as a result of this audit but a strong evidence base would help standardise this further.

#### 0791: A TWO-CYCLE AUDIT ON HYPOCALCAEMIA POST COMPLETION AND TOTAL THYROIDECTOMY – ARE WE FOLLOWING THE GUIDELINES?

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**Introduction:** British Thyroid Association guidelines state that serum calcium should be checked on the day after surgery and daily until the hypocalcaemia improves. The aim of the audit is to evaluate adherence to guidelines.

**Methods:** First cycle includes all completion/total thyroidectomy patients from January 2007–June 2010. The second cycle includes all patients from January 2012–2013. Information collected from retrospective case-note review included thyroid pathology, central compartment neck dissection, number of lymph-nodes harvested, consecutive serum calcium levels, administration of calcium supplements and discharge on calcium.

**Results:** A total of 57 and 40 patients were included in the first and second cycle, respectively. The first-cycle showed that serum calcium measured on day 0 post-operatively were not indicative of developing hypocalcaemia and were all greater than 2.0mmol. Results from the first-cycle showed that, 25/106 (23.6%) did not receive a calcium check in the first 24 hours. Following the presentation of first-cycle results and BTA guidelines to the